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Sponsored by

U.S. Environmental Protection Agency

PANEL #3: USING PERFORMANCE MEASURES IN STATE/EPA AGREEMENTS

Presented by

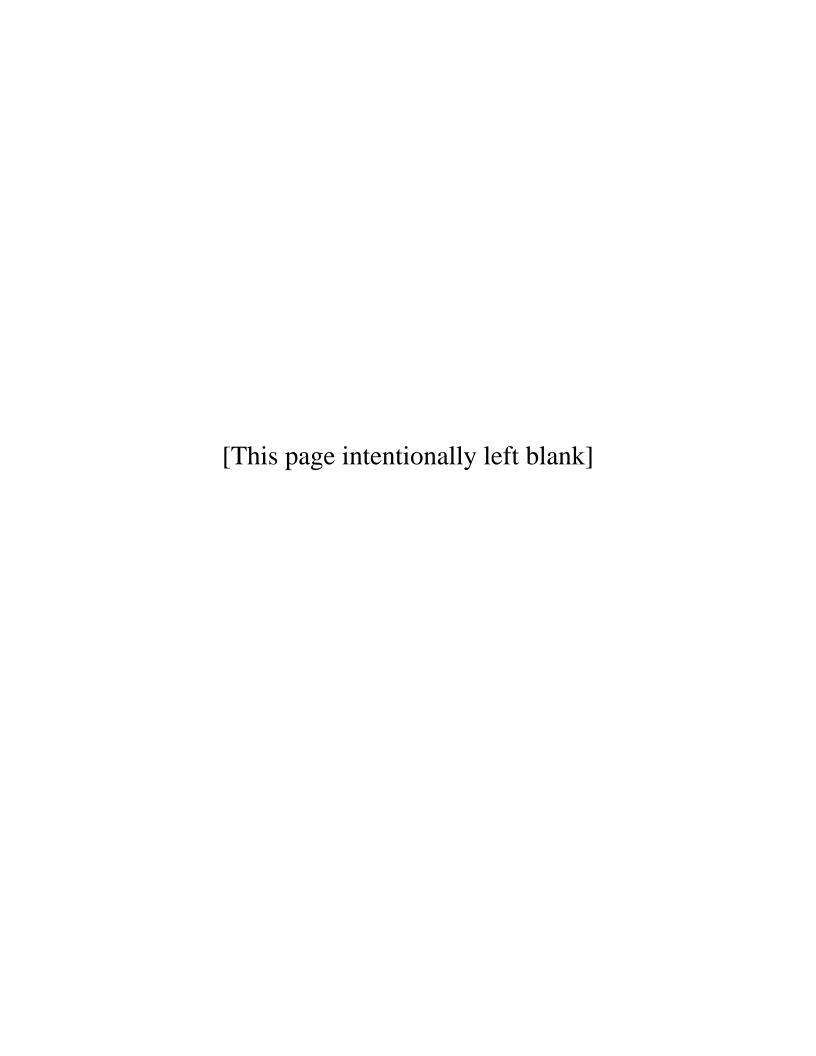
Art Horowitz , U.S. EPA, OECA (moderator)
Suzie Peck, Massachusetts Department of Environmental Protection
Gerry Geitka, Maryland Department of the Environment
Paul Balavender, Connecticut Department of Environmental Protection

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Introduction to Panel Discussion on Using Performance Measures in State/EPA Agreements

Objective

The objective of the panel is to discuss the implementation of outcome-based performance measures in the agreements (ie, Performance Partnership Agreements [PPA], Performance Partnership Grants [PPG], or categorical grants) negotiated by EPA and states.

Background

EPA and the states have been working for some time to develop ways of measuring the results of our environmental protection work. No matter what measures we develop, the critical issue is to give these measures meaning by making them a functional part of the environmental protection program. Ultimately, the way to make performance measures functional is through the agreements negotiated between EPA and states that implement the programs. The primary Agency initiative to promote the use of performance measurement in our agreements is the National Environmental Performance Partnership System (NEPPS), which was initiated in 1995.

The main principles of NEPPS are to improve state performance, to reform oversight, and to improve the use of outcome and performance measures. NEPPS continues to develop, but clearly one of the main challenges facing this program is in identifying appropriate and consistent performance measures. Accordingly, the Office of Compliance has been working with states to identify a measurement framework and to develop new and appropriate measures, including awarding grants to states to develop performance measures.

The Office of Planning, Policy Analysis, and Communications (OPPAC) awarded grants to four states (Colorado, Connecticut, Maryland, and Massachusetts) to continue to improve outcome measures and to begin to incorporate those measures into their performance partnership agreements and grants. Each of these projects is taking different approaches to developing performance measures, but they all face common challenges in negotiating performance criteria and measurement into grant agreements with EPA. The purpose of the panel discussion is to begin a dialogue for implement performance measurement in our agreements.

Discussion Issues

Below are a couple of straw issues to be a starting point for the discussion that could be addressed by the panel. Not every panelist needs to address each issue. There might be additional issues the panelists want to address.

- 1. Enforcement and compliance assurance in PPAs and PPGs in general, ie, the best way to approach compliance and enforcement in the NEPPS context.
- 2. Selecting the right goals objectives, both state and EPA, ie, satisfying both state and EPA environmental program requirements.
- 3. Linking the projects and project activities to the goals and objectives, ie, making the measures a functional part of the agreement.
- 4. The negotiation process, ie, who negotiates the measures into the agreements.

Results of the Discussion

The discussion should result in a better understanding of the need to be including better enforcement and compliance assurance performance measures in grant and performance agreements. Specific results may include:

- 1. Identify best practices for negotiating enforcement and compliance assurance performance measures into PPAs and PPGs
- 2. Identify issues relating to negotiating enforcement and compliance assurance performance measures into PPAs and PPGs that need further discussion.





New Measurements and the Massachusetts DEP-EPA New England PPA

Suzie Peck Massachusetts Department of Environmental Protection





New Measurements and the MA DEP- EPA New England PPA

Presenter: Suzie Peck

4/16/03 MA DI

Notes

Why do we measure Compliance and Enforcement?

- Program Management: Are we managing our compliance and enforcement programs properly --
 - -Are we doing the work we said we would do?
 - -Are sources being treated equally within and across states
- Program Effectivness: Are we attaining our environmental goals -- is the compliance and enforcement program having the desired the effect (accomplishing our goals).
- Program Improvement: If we aren't attaining our goals how can we fix the problem, If we are attaining our goals, are we doing it as efficiently as possible?

716/03 MA DEP

Notes

- The purpose of our project was not to do something new, but to do something with ERP, root cause analysis, some data work, and link compliance rates with environmental outcomes
- Compliance rates could be a simple yes/no:
 - What % of universe is in compliance?
 - What % of actions is a facility in compliance with? (If I have 10-20 things to comply with, how many have I already complied with?) We have moved from 60% to over 90% over a couple years.
 - Or –What % of the universe is in compliance with each requirement?

What is the goal of Compliance and Enforcement work?

Get companies to comply with the *regulatory requirements* -- emission limits, discharge limits, control requirements, waste management practices, monitoring and reporting --

that were established in order to achieve the desired *environmental outcomes* -- attain and maintaining ambient air quality and surface and groundwater standards, ensure that hazardous waste is handled safely to avoid the risks of illegal disposal, and unplanned spills and releases.

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Notes

- If you look at compliance rate compared with projected benefit, you can project how much environmental benefit you are going to get from a particular compliance improvement effort.
- You need to look at sector performance to see real environmental outcomes, not individual facility performance.
- Using these compliance rates, you can find out which compliance requirement (of many) was the most essential (i.e. earned you the most environmental benefit). You can identify those groups that are not complying with this certain requirement and focus on increasing that group's compliance.

MA is moving toward compliance rates to measure the success of our Compliance and Enforcement programs

- Desired environmental outcomes are very broad. With some exceptions it is usually difficult to link the compliance status of individual "sources" to these environmental outcomes
- Can link the status of a sector to broad goals, since standards were generally set for sectors, as the sector compliance rate goes up, you are more likely to achieve your desired outcome
- Compliance rates allow you to identify what your specific compliance problems are and if they are systematic problems, develop strategies to fix address the problem more efficiently ^{MA DEP}

Notes

- The kind of compliance rate you choose to focus on should depend on your goal: raise compliance level of the sector (MADEP) vs. trying to improve compliance on a facility-byfacility basis by finding and punishing the bad guys. If you focus on identifying the most important compliance problems in a sector (by random inspections) and then on systemic ways to solve those problems for the sector as a whole, you may be able to improve environmental outcomes while decreasing the number of inspections.
- Also may need to change from targeted to random inspectionsthis way you can increase the overall level of compliance rather than the number of complying facilities or the number of higherlevel enforcement actions.

How is this different than before?

Prior Goal: The program is most effective if you find the greatest number of sources out of compliance and take enforcement action against them

Prior Measures:

- #s of inspections (are you inspecting enough)
- % higher level enforcement (the more noncompliance you find per inspection the greater the effectiveness of your program)

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Notes

 Example - The biggest NON-issue was drum labeling. If the responsibility for labeling was transferred to transporters, the problem would go away. Another example of a set of NONissues was attributable to a particular technology that everyone was using that just didn't work.

How does this approach affect the work we do?

- Random versus targeted inspections
- Fewer higher level enforcement cases / inspection
- More time spent on analyzing causes of non compliance and identifying solutions (which can include increased inspections and enforcement or other strategies such as changing regulations, requiring certifications, better technical assistance, working with industry groups or waste management/pollution control service providers)

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Notes

Who cares?

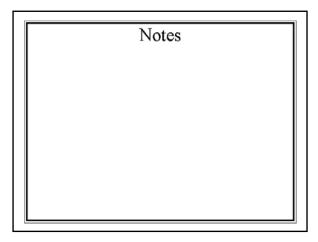
- EPA National Media Programs
- EPA OECA
- EPA Regional Media Programs
- EPA Regional Enforcement Programs
- State Enforcement Planning and Management Staff
- · State Inspectors
- State Media Programs
- State Attorneys General
- the Public
- the Legislatures (State and Federal)

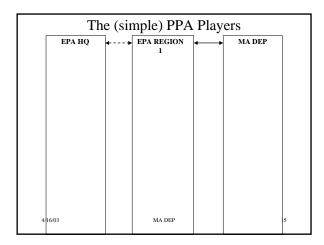
And it all gets played out in the PPA

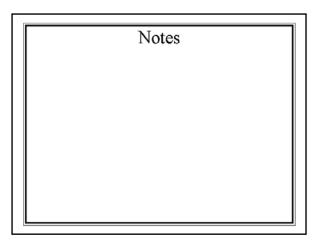
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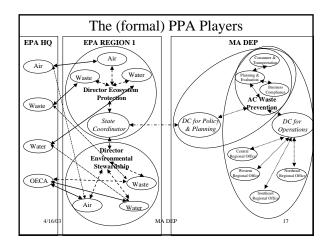
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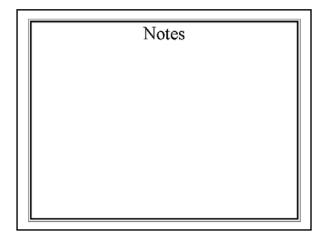
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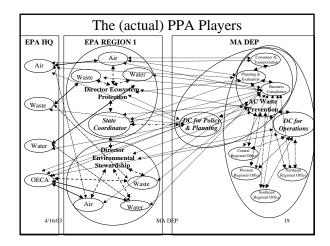


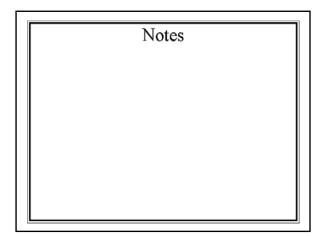












Mechanisms that will help

- PPA Grant Negotiation Process
- · Innovations Agreement

4/16/03 MA DEP

Notes

• Innovation Agreement says that when the state wants to do something different, there is a process to follow.

PPA negotiation procedures

- No micro management
- Broad C&E outputs, not specific sites
- Major Deliverables
- Respect for each other's imperatives
- Routine planning meetings

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Notes

Innovations agreement content

- Commitment to create a work environment to foster innovation identification and implementation
- Identifying innovative projects
- Clearly articulating resources, investments and disinvestments needed to implement innovation
- Clearly articulating EPA and State roles and responsibilities for supporting and implementing innovation
- · Developing Measures of Success for the innovation
- Evaluating the innovation

MA DEI

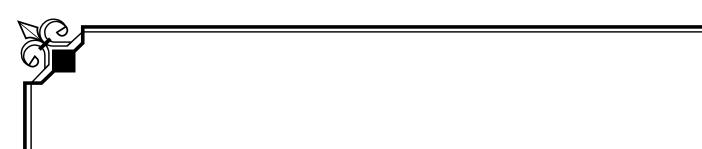
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Questions and Answers

- Comment: Regarding the scoring system, not all requirements carry equal weight.
- Response: The whole concept of EBPIs is to pick the ones that are most meaningful to compliance, such as record-keeping, using the right control technology, and reporting. We are beginning to think strategically about what our compliance goals are.
- Q: Is there text in this Innovative Agreement requirement we can have and use?
- A: Yes. I can get it to you.

Questions and Answers

- Q: What does random inspection mean?
- A: This is still preliminary, but for major sources we are still
 doing the traditional approach: permits, and routine, relatively
 frequent inspections, which are sometimes targeted. Where it
 becomes an issue is for the many many smaller sources, such as
 smaller hazardous waste generators, where we don't have the
 resources to inspect them. We need to look at them by sectors
 (SIC code, facility size, waste type, other criteria).





Park Heights Initiative: An ERP Pilot Project

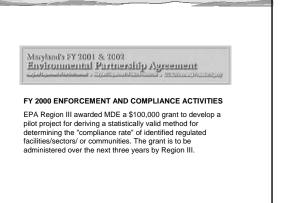
Jerry Geitka Maryland Department of the Environment

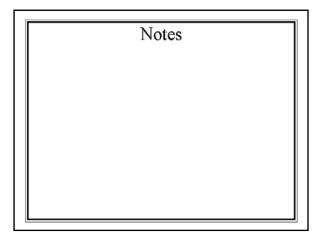




Park Heights Initiative: An ERP Pilot Project

Mr. Gietka's presentation will be focused on showing how MDE linked the Park Heights ERP initiative, which was included in MDE's PPA, to missions, goals and objectives. He will also discuss how the project activities evolved from those goals and objectives. The Park Heights project illustrates the process. From the specific project, Mr. Gietka hopes to present some broader concepts that are under consideration but have not been adopted by MDE as policy at this time. These concepts are directed toward how to accomplish choosing the right goals and objectives for PPA's, PPG's and other performance measurement initiatives (such as the Maryland Managing for Results state wide initiative).



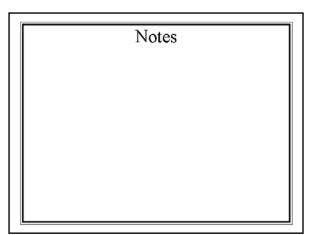


Park Heights Initiative
An ERP Pilot Project
MDE

Project Manager: Bernie Penner Technical Project Manager: Jerry Gietka

Intellectual Property of MDE Office of Enforcement and Compliance

July 22, 2002



Mission 48

- MDE: To <u>protect</u> and restore the quality of Maryland's <u>air, water and land</u> resources, while fostering <u>economic development</u>, safe <u>communities</u>, and quality environmental <u>education</u>, for the benefit of the environment, public <u>health</u> and future generations.
- ⇒ EPA: To <u>protect</u> human <u>health</u> and to safeguard the natural environment--<u>air</u>, <u>water</u>, <u>and land</u>-upon which life depends.

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Notes

Project Goal:

Conduct an Environmental Results Project

- concrease the compliance rate of the regulated facilities
- use scientific analysis and statistical methods to measure

□a change in their behavior□the effectiveness of the MDE intervention

the benefit to the community

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July 22, 2002

Notes

- Project goal: To conduct an environmental results project and increase compliance rate of the regulated facilities
- By using scientific analysis and statistical methods to measure a change in their behavior, the effectiveness of the MDE intervention, and the benefit to the community increased.

		Input Measures		€
Expenditures		Includes EPA Grant and MDE match.		Projected to be \$286,000 over the life of the project, to do a pilot to test some concepts. Expenditures as of 04/01/2003 = \$38,139.09.
Identified Universe at ris those impacte		Population of the Park Heights- Reist community, using census data estimates.		Projected at 261,789 * See methodology below.
Identified Universe of Stressors: what is causing the risk or impact		Number of auto body and mechanical repair facilities in the Park Heights- Reist community.		Projected to be 150. The Community Association identified 59. 43 are in the study.
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	July 22, 2002			

Notes

- Began with various input measures, including how much money did you have to spend on the identified universe at risk, and the universe of stressors.
- Also separated population into legislative districts because they were talking to various politicians who were interested in this issue.

Unit Cost Measure/CONTROVERSIAL CONCEPTUAL INNOVATION ONLY					
per uni Identifi Univers impact	ed se		MDE Expenditures divided by the Population of the Park Heights- Reist community		Per unit cost projected to be \$
per uni Identifi Univers the imp	ed se causing		MDE Expenditures divided by the number of auto body and mechanical repair facilities in the Park Heights- Reist community.		Per unit cost projected to be \$
Intellectual Property of MDE Office of Enforcement and Compliance					

Notes

Measures developed: Unit of identified universe impacted (MDE expenditures divided by the population of the Park Heights community) and per unit of identified universe causing the impact (MDE expenditures divided by the number of auto body and mechanical repair facilities in the Park-Heights community).

Output Measures						
complia assistar measure inspecti	nce e:	Number of inspections performed. Inspection will be performed by EPA multi-media teams. Inspections will be conducted in both phases 1 and 2.	Projected to be 45 each phase for a total of 90. Actual was 43 in first phase. Completion dates are projected to be August 2002 and 2003.			
compliance assistance measure: workbooks		Number of workbooks distributed. In phase 2, the Community Association will be distributing workbooks to all facilities.	Projected to be 150. Projected date is July 2002 thru June 2003.			
compliance assistance measure: training		Number of attendees at workshops. In phase 2, the Community Association will invite all facilities identified in Phase 1 for training. MDE will provide the training.	Projected to be 45. Projected date is July 2002 thru June 2003.			
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July 22, 2002						

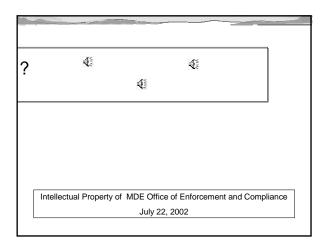
Notes

 Goal and definition of success: A 10% increase in compliance from the baseline (In October 2003 they will be performing the second set of inspections).

Outcome Measures						
Increase in compliance rate of the sample by the completion of the project.	Compliance rate measured at follow-up inspections compared to baseline compliance rate found during first round of inspections	Projected to be +10%. Project completion date projected to be Feb, 2004				
Positive change in behavior in the sample by the completion of the project	As measured by Environmental Business Performance Indicators.	Projected to be +10%. Project completion date projected to be Feb, 2004				
Benefit to the Community by the completion of the project	Currently under development.	Projected to be +10% improvement. Project completion date projected to be Feb, 2004				
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July 22, 2002						
July 22, 2002						

Notes

- Developed several outcome measures: For example,
 - Increase in compliance rate of the sample by the completion of the project;
 - Positive change in behavior in the sample by the completion of the project;
 - Benefit to the community by the completion of the project.



Questions and Answers

- Q: How did you eliminate bias?
- A: Each question had instructions and guidelines for how the questions on the survey were to be asked so that inspectors would used the questions consistently. The inspection of facilities was random.
- Q: You talked abut effectiveness of intervention can you say what worked and what didn't?
- A: We don't know yet. Just starting to give out our workbooks and do workshops. Hope to have final report by end of January.

- Questions and Answers

 Q: Regarding community involvement They helped you
 ID facilities. Are they happy with where you are now?
- A: The community wanted to help, and they offered to help in the ways that they can.
- Q: How does cost benefit analysis on these project
- A: You can't get to all of the numbers you need because you don't have activity-based costing. Ultimately, you want to know where you can get the biggest bang for the buck. We do have five years' worth of data. We're going to use this project to figure out how to ask better questions in the future.





Using Performance Measures in State/EPA Agreements: Elevating Compliance with General Permits

Paul Balavender Connecticut Department of Environmental Protection





Using Performance Measures in State/EPA Agreements

Elevating Compliance With General Permits



Connecticut Department of Environmental Protection

1st Annual EPA, OECA Grant Conference Washington, D. C. April 2003

Notes

Speaker: Paul Balavender, CT DEP



Notes

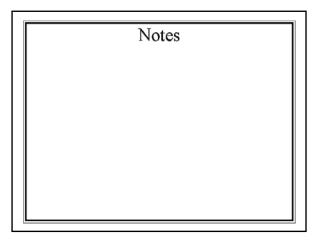
- These pictures are examples of what tumbling and cleaning facilities look like.
- EPA's Region 1 and its states meet on a regular basis which allows for an opportunity for frequent dialog.
- Region 1 deserves praise for getting states to work together.
- These meetings have promoted problem solving, introduced problem solving training and work groups with management and staff.
- Some storm water initiatives have come from these meetings.



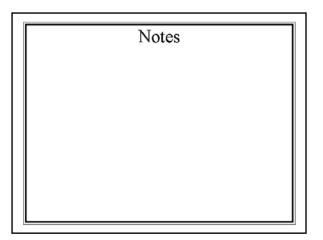
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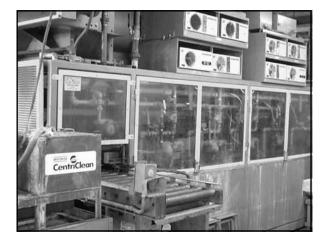
Paul Balavender, CT DEP

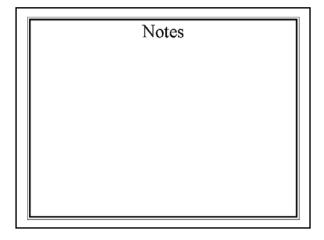












Discharge of Minor Tumbling or Cleaning of Parts Wastewaters General Permit Requirements

- Monitor discharge at prescribed frequency for specific parameters (metals, pH, temperature)
- Record exceedances in log; selfcorrect causes of repeat violations
- Submit analytical results upon request

Notes

- General permit authority: There are over 40 general permits, mostly in the water area, and 40,000 permitees.
- Many haven't made any investments to insure compliance rates.
- DEP wants to elevate general permit compliance.
- They picked two areas to look at: minor tumbling and cleaning of parts.
- Each permitee has to monitor on a quarterly basis for several things—they have to register every exceedance and then if they have multiple exceedances they have to self-correct and notify the DEP

Project Objectives

- Determine baseline compliance
- Identify root causes of non-compliance
- Develop and apply assistance and enforcement strategies to elevate compliance

Notes

Information Gathering

- Monitoring data, violation log and survey response requested from all 159 registrants
- 84% response rate to initial request;
 97% overall response rate
- Four on-site inspections of nonresponders

- Made sure they signed for the product and then sent out a second letter saying DEP would inspect if the survey was not returned.
 All but 4 responded to this letter.
- Those four that did not respond were the targets of on-site inspections.
- This project was of significant interest to those who want to maintain the general permit program.
- Statistical results showed rather dismal compliance rates, but it is not unexpected to see so many out of compliance. This is an issue for general permits.

Statistical Results

- 4% (7/159) of packages undeliverable
- 28% (42/152) no longer discharged under general permit
- 10% (11/110) of registrants met all monitoring requirements
- 83% (91/110) of registrants were in partial compliance with monitoring requirements

Notes

Root Causes of Non-Compliance

- Facility management unaware they were covered under the general permit
- Facility management unaware of monitoring requirements
- The facility had insufficient staff or monitoring equipment

Notes

- One reason for noncompliance was that many facility operators were unaware they registered for general permits (this is surprising).
- The second most common reason for noncompliance was that they were unaware of monitoring requirements.
- The last reason was that they admitted not having staff or equipment they needed.

Enforcement

- 15 administrative consent orders for 3 non-responders, facility-wide audits, penalties between 18-25k and annual submission of DMRs
- 1 referral to the Attorney General's Office

- In response, DEP drafted an administrative consent order, and collected \$103K from the three nonresponders who did not have any monitoring data.
- There was only one facility that was unwilling to sign; their case was sent to the Attorney Generals' office.

Assistance

- Distribute initiative summary, analytical methods guidance and laminated permit fact sheet to all registrants
- Recognition letter sent to 11 registrants in full compliance

Notes

Second Request For Data

- Request for monitoring data to 75 registrants in January 2003.
- 68 responses received
- Forwarded to consultant for analysis

Notes

Next Steps

- Review and consider changes to general permit
- Enforcement follow-up as appropriate

- DEP learned that they needed to rewrite some of their general permits.
- They also sent recognition letters commending those 11 facilities that were in full compliance.
- They are looking at self-certification as part of a general permit obligation.

Discharge of Minor Printing and Publishing Wastewaters General Permit

- Objective to increase registrations under general permit
- Provide notice of general permit requirements and assistance
- Request return of survey
- Conduct follow-up inspections

Notes

- Put out general permit, and had 60 registrants but identified many more facilities.
- Resulted in a large increase in registrations in 3 months.
- As follow up, DEP inspected 15 sewered and 15 unsewered sites

Results

- Registrations increased from 60 to 170; 120 additional registrations currently being reviewed for sufficiency
- 54% survey response rate (553/1020)
 - 66% of responses indicated no discharge

Notes

Inspections

- 15 sewered sites inspected
 - 9 no discharge
 - 2 OOB
 - 1 wastewaters shipped off-site
 - 2 already registered for GP (name change)
 - 1 issued Notice of Violation for discharge without a permit

Inspections

- 15 unsewered sites inspected
 - 7 no discharge
 - 2 OOB
 - 4 wastewaters shipped off-site
 - 1 already registered for GP (merger)
 - 1 issued Notice of Violation for discharge without a permit

Notes

- In both cases (sewered and unsewered), 14 out of 15 didn't require the general permit, some were out of business.
- We attempted to make facility operators understand that the focus of this analysis was the general permit program and not these two sample industries.

Questions and Answers

- Q: How did they get the 15 administrative orders?
- A: Those were the 15 they had to inspect. In these cases, the facilities didn't know they needed to do monitoring. They were the most egregious cases.
- Q: How was this reflected in your PPA?
- A: It was reflected in cross-media compliance initiatives.
 This effort also spawned other initiatives with storm water components, which will be reflected in the next negotiation.

Questions and Answers

- Q: Did you get a grant, or disinvest in other work with Region 1 to do this work?
- A: We did get a grant. Region 1 expressed a willingness to do disinvestments if necessary to accommodate these special projects, but they haven't needed to do that.